

Serial No. 09/747,350

- 2 -

Art Unit: 2153

REMARKS

This paper is responsive to the Office Action dated December 19, 2003. All rejections and objections of the Examiner are respectfully traversed. Reconsideration and further examination is respectfully requested.

In paragraphs 1 and 2 of the Office Action, the Examiner rejected claims 1-11 as being anticipated under 35 U.S.C. 102 by United States patent number 6,421,731 of Ciotti, Jr. et al. ("Ciotti, Jr. et al."). Applicants respectfully traverse this rejection.

Ciotti, Jr. et al. disclose a method for routing packets among nodes of a wireless network, in which the nodes maintain a list of nodes which are reachable through them based on advertisements received from other nodes. The nodes of the Ciotti, Jr. et al. system advertise their lists of reachable nodes, and, when receiving a data packet for which they are not the ultimate destination, forward the data packet towards the ultimate destination based on their lists. Fig. 2 of Ciotti, Jr. et al. shows an example embodiment of the list maintained by each node, consisting of a routing table 34 including entries for other nodes in the network which are reachable.

Nowhere in Ciotti, Jr. et al. is there disclosed or suggested any system or method for synchronizing a route change in a routing table with a plurality of multicast routing protocols that operates by:

assigning a route ID value to each route in the routing table;

Serial No. 09/747,350

- 3 -

Art Unit: 2153

assigning a bookmark in a route change queue to each multicast routing protocol, the bookmark having a value equivalent to the route ID value of the last route processed by the multicast routing protocol;

assigning a new route ID value to each route changed in the routing table;

storing each route changed in the route change queue; and

comparing the bookmark value of each multicast routing protocol to the highest route ID value in the route change queue. (emphasis added)

as in the present independent claims 1 and 7. The system of Ciotti Jr., et al. operates instead based on the routing table illustrated in Fig. 2. See also Fig. 5-6 of Ciotti Jr., et al., which further illustrate the use of the routing table to perform routing updates in the nodes of the network. Ciotti Jr., et al. includes no hint or suggestion of even the desirability of storing changed routes in a change queue outside the routing table. In contrast to the present independent claims 1 and 7, Ciotti Jr., et al. teach a system for updating routes in a route table that relies on a triggered update based on a "Route Change" field (RC). Ciotti Jr., et al. expressly describe the use of the RC field beginning at line 36 of column 5 as follows:

Finally, each entry in the routing table 34 includes a "Route Change (RC)" field 46 which is set when a new route is added or an existing route is changed. For example, if a new route entry is added to the routing table 34 or an existing route is changed, a route change flag in the RC field 46 is set to "Y". Otherwise, the flag in the RC field 46 is reset to "N". Such information in the RC field 46 is used by the subject node 25 when performing a triggered update as is described more fully below in connection with FIG. 12.

In Fig. 12 of Ciotti Jr., et al. shows a method where changed routes are passed between the nodes based on set values of the RC field in the routing table. Accordingly, Ciotti Jr., et al. provide a system for maintaining and updating routes using routing tables, but without any teaching of a feature such as the route change queue of the present independent claims 1 and 7, or anything similar to the operations performed on the route change queue, as set forth in the present independent claims 1 and 7.

Serial No. 09/747,350

- 4 -

Art Unit: 2153

With regard to independent claim 6, nowhere in Ciotti Jr., et al. is there disclosed or suggested a route entry for a route in a routing table for a plurality of multicast routing protocols, including:

- an address for the route source network;
- an address for the next hop of the route;
- an address for the next hop interface of the route;
- a route state value for indicating the current state of the route;
- a routing protocol identifier for identifying the routing protocol associated with the route; and*
- a route ID value for determining when the route entry has been processed by each of the plurality of routing protocols. (emphasis added)*

As in claim 6. As shown in Figs. 2, 5 and 6, Ciotti Jr., et al. teaches a routing table entry having a "Node" field containing the network ID of the ultimate destination node corresponding to the entry, a "Hop" field containing the network ID of the node serving as the next hop in a communication link between the node and the node identified in the "Node" field, a "Metric" field containing a metric associated with sending a data packet to the ultimate destination node indicated in the "Node" field, a "timeout" field containing a timeout period used to determine whether the corresponding entry has been updated within a predefined period of time, and a "Route Change (RC)" field which is set when a new route is added or an existing route is changed. Accordingly, Ciotti Jr., et al. fail to provide any teaching towards a protocol identifier field for identifying an associated protocol for the entry, or a route ID value field indicating whether the entry has been processed by a plurality of routing protocols, as in the present claim 6.

For the above reasons, Applicants respectfully urge that Ciotti Jr., et al. does not disclose or suggest all the features of the present independent claims 1, 6 and 7. Accordingly, Ciotti Jr., et al. does not anticipate claims 1, 6 and 7 under 35 U.S.C. 102. As to the remaining claims, they

Serial No. 09/747,350

- 5 -

Art Unit: 2153

each depend from claims 1 and 7, and are believed to be patentable over Ciotti Jr., et al. for at least the same reasons. Reconsideration of all pending claims is respectfully requested.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone David A. Dagg, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

MARCH 18 2004
Date

David A. Dagg
David A. Dagg, Reg. No. 37,809
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
125 Nagog Park Drive
Acton, MA 01720
(978) 264-6664

Docket No. 2204/A44 120-199